Precision

**INTRODUCTION & PURPOSE**

- Describe what **PRECISION** means for the purpose of these modules
- Make an **IMPRECISE ITEM MORE PRECISE**

**KEY CONCEPTS**

- **Alignment**
- **Scoring**
- **Bias**
- **Rigor**
- **Assessment Design**
- **Precision**

**PRECISION**

- Precision
- How to Design Precise Assessment Items
Precision

KEY CONCEPTS

- Precision
  - When an assessment and/or item is accurate and clear.

Sources:
- Relay Graduate School of Education, "Designing and Evaluating Assessments" (2013).

KEY CONCEPTS

- Precision
  - How to Design Reliable Assessments

- Precision
  - Formatted in a logical order
  - Do NOT contain typos or factual errors
  - Contain accurate and clear instructions
  - Include all of the information students need to demonstrate their knowledge and skills.

Sources:
- Relay Graduate School of Education, "Rules for Constructed Response Item Design" (2013).
- Relay Graduate School of Education, "Rules for Multiple Choice Item Design" (2013).
KEY CONCEPTS

Precision

How to Design Precise Assessment Items

Choose the one answer that best solves the problem.

If one card is taken at random from a deck of playing cards, what is the probability that the card will be an ace?

a. 8 percent  
b. 50 percent  
c. 25 percent  
d. 10 percent

Source: New Jersey Department of Education. SGO 2.0—From Compliance to Quality (2014).
Marcus has 34 marbles. He puts an equal number of marbles into four bags. For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles that Marcus puts in each bag.

a. $36 \times 4 = $  
   
   Yes or No?

b. $36 + 4 = $  
   
   Yes or No?

c. $36 \times x = 36$  
   
   Yes or No?

d. $36 \div x = 36$  
   
   Yes or No?
Marcus has 36 marbles. He puts an equal number of marbles into each of four bags.

For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles Marcus puts in each bag.

1a. 36 × 4 = ☐
☐ Yes ☐ No

1b. 36 ÷ 4 = ☐
☐ Yes ☐ No

1c. 36 × ☐ = 36
☐ Yes ☐ No

1d. 36 ÷ ☐ = 36
☐ Yes ☐ No

Football quarterbacks, who line up directly behind the offensive line, are often tackled during games _______ they do not have a good offensive line.

a. even though  b. although  c. in spite of  d. because
Choose the conjunction that completes the sentence.

Football quarterbacks, who line up directly behind the offensive line, are often tackled during games _______ they do not have a good offensive line.

a. even though  
b. although  
c. in spite of  
d. because
Precision

CHECK FOR UNDERSTANDING

Describe what Precision means for the purpose of these modules

Make an imprecise item more precise

---

CHECK FOR UNDERSTANDING

Assessment Item

---

CHECK FOR UNDERSTANDING

Assessment Item

How might you improve the accuracy and clarity of this assessment item?

Find x.

10 cm

---
CHECK FOR UNDERSTANDING

Assessment Item

How might you improve the accuracy and clarity of this assessment item?

Find x.

\[ x = 10 \text{ cm} \]

CHECK FOR UNDERSTANDING

Assessment Item

How might you improve the accuracy and clarity of this assessment item?

What is the value of \( x \) in cm? Show your work in the space provided.

\[ x = 10 \text{ cm} \]

CONCLUSION